

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Inventor: Raymond Hesline

Serial Number: 10/553,132

Group Art Unit: 2872

Filed: October 14, 2005

Examiner: Derek S. Chapel

Title: Optical Isolator, Attenuator, Circulator and Switch

**FILED ELECTRONICALLY 10/17/2010**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O.Box 1450  
Alexandria, Va 22313-1450

Dear Sir,

**APPELLANT'S BRIEF PURSUANT TO 37 C.F.R. § 41.37**

Appellant submits this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2872, mailed January 19, 2010, finally rejecting claims 13-20. The final rejection of claims 13-20 is appealed. Appellant's Brief was due July 18, 2010 pursuant to § 41.37 (a) (1). Appellant requests an extension of time under § 1.136 of three months extending the time for response to October 18, 2010. This brief is filed prior to the extended deadline and is therefore timely filed. Fees for filing this Brief \$270 (small entity) and Request for Extension of Time \$555 (small entity) have been transmitted separately.

## **I. REAL PARTY OF INTEREST**

The real party of interest is Heslin Pty Ltd, 1/23 Monterey Road, Bilgola, New South Wales, Australia 2107.

## **II. RELATED APPEALS AND INTERFERENCES**

None.

## **III. STATUS OF CLAIMS**

Claims 1-12 were previously canceled. Claims 13-20 are pending, stand rejected, and are the subject of this appeal. Claims 13-20 are set forth in the attached Appendix.

## **IV. STATUS OF AMENDMENTS**

All claim amendments have been entered by the Examiner. No amendments to the claims were proposed after the final rejection.

## **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Claim 13, which is the only independent claim of this application, recites an optical device comprising a first combination of birefringent prisms with parallel optic axes for dividing an optical input beam into polarized beams, a second combination of birefringent prisms with parallel optic axes for combining polarized beams into an output beam, and a polarization changer disposed between said first combination of birefringent prisms and said second combination of birefringent prisms, wherein each birefringent prism of each said combination of birefringent prisms has oblique input and output faces. [See, for example,

page 5, lines 5-15 & figures 3A and 3B; page 6, lines 22-24 & figures 4A and 4B; page 7, lines 18-29 & figures 5A and 5B; and page 9, lines 1-12 & figures 7A and 7B.]

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 13-16 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Zhao et al.*, U.S. Patent Application Publication 2003/0113055 A1, in view of *Hesline*, U.S. Patent Number 5, 864,428.

Claims 13, 15-16 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Liu et al.*, U.S. Patent Application Publication Number 2003/0020989 A1, in view of *Hesline*, U.S. Patent Number 5, 864,428.

Claims 13, 16-17 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pan et al.*, U.S. Patent Application Publication Number 2003/0147136 A1, in view of *Hesline*, U.S. Patent Number 5, 864,428.

## **VII. ARGUMENT**

### **Rejection of Claims 13-20 Under 35 U.S.C. § 103(a).**

Appellant contends that the Examiner has erred in rejecting claims 13-20 under 35 U.S.C. § 103(a) by citing the inventors own work as prior art when it is not a statutory bar to the pending application.

In the Final Office Action, January 19, 2010, the Examiner asserts:

With respect to the arguments that U.S. Patent Number 5,864,428 (of record) cannot be used against the applicant because it is the applicant's own work, this argument is not persuasive. 5,864,428 qualifies as art under 35 U.S.C. 102(b) and therefore is a statutory bar under 35 U.S.C. 102(b) and thus cannot be overcome by an affidavit or declaration under 37 CFR 1.131, and is eligible for use in the rejections set forth above under 35 U.S.C. 103(a). As shown by the quotations of

the appropriate paragraphs of 35 U.S.C. 102 set forth below, a patent eligible for use under 102(b) may be by anyone (including the inventor).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(See page 12, line 19 through page 13, line 10.)

In reply, under 37 C.F.R. § 1.116(c), January 27, 2010, Applicant argued that US Patent Number 5,864,428 and the pending application are not of the same invention, and so U.S. Patent Number 5,864,428 does not qualify as prior art under 35 U.S.C. § 102(b) :

Applicant argues that the single claim of US Pat. No. 5,864,428 does not teach, either explicitly or impliedly, “an optical device comprising a first combination of birefringent prisms with parallel optic axes for dividing an optical input beam into polarized beams, a second combination of birefringent prisms with parallel optic axes for combining polarized beams into an output beam, and a polarization changer disposed between said first combination of birefringent prisms and said second combination of birefringent prisms, wherein each birefringent prism of each said combination of birefringent prisms has oblique input and output faces”.

The optical device of the pending application is not a polarizing device (as is the device of US Pat. No. 5,864,428) but merely uses a polarizing device in its operations. A “polarization changer” is an essential element of the device of the pending application, allowing it to operate as an optical isolator, attenuator, circulator or switch. There is no polarization changer present in the polarizer of US Pat. No. 5,864,428.

Applicant argues that US Pat. No. 5,864,428 does not qualify as prior art under 35 USC 102(b), as US Pat. No. 5,864,428 and the device of the pending application are not the same invention.

(See page 3, lines 1-20.)

In Advisory Action, February 16, 2010, the Supervisory Patent Examiner replied:

First, new grounds of rejection we[re] not set forth in the Final Office action mailed 1/19/2010. The rejections were exactly the same as those set forth in the Final Office action mailed 2/26/2009.

Next, the claims have not been rejected under 35 USC 102(b). The Examiner cited 35 USC 102(b) in the response to arguments section merely to show that prior art that “was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States” is eligible as prior art even if it is the applicant’s own work. Therefore, if the date of a prior art reference meets the date requirement under 35 USC 102(b), it is eligible for use under 35 USC 103(a) even if it is applicant’s own work.

Finally, the claims were not rejected solely in view of 5,864,428 to Hesline. In fact the claims were rejected in view of Hesline and Zhao, Liu and Hesline, and Pan and Hesline under 35 USC 103(a). Therefore, it is not expected that Hesline disclose all of the claimed limitations. It is the combination of Hesline with the other references that disclose all of the claimed limitations.

The affidavit filed 1/27/2010 is acknowledged. However, the affidavit does not overcome the prior art references and therefore, the rejections of the claims are hereby maintained.

(See page 2, lines 2-10.)

In this Advisory Action (and in subsequent Advisory Actions), the Supervisory Patent Examiner implies that an applicant’s own work can be prior art under 35 U.S.C. § 103(a) when it is *not* prior art under any of the statutory categories of 35 § U.S.C. 102, that is when there is no statutory bar.

Appellant contends that an applicant’s own work can only be prior art under 35 U.S.C. § 103(a), if it is also prior art under a statutory category of 35 § U.S.C. 102. Appellant cites: Subject matter that is prior art under 35 U.S.C. § 102 can be used to support a rejection under section 103. MPEP § 2141.01; The term ‘prior art’ as used in section 103 refers at least to the statutory material named in 35 U.S.C. § 102. *In re Wertheim*, 646 F.2D 527,532, 209 USPQ 554, 560 (CCPA1981); [T]he work of the same inventive entity may not be considered prior

art against the claims unless it falls under one of the statutory categories. MPEP § 2129; Absent statutory bar, Applicant's own invention cannot be 'prior art' to him *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

Note, in MPEP 2141.01, US Patent Number 5,864,428 is not admitted art. See *Riverwood Int'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1354, 66 USPQ2d 1331, 1337 (Fed. Cir. 2003).

Appellant believes that the date requirement referred to by the Supervisory Patent Examiner only applies to art that is of a statutory nature.

Appellant contends that no evidence has been advanced by the Examiner to show that the invention of the pending application has been patented or described in a printed publication in the United States or a foreign country or been in public use or on sale in the United States, more than one year prior to the date of application for patent in the United States, that there is no statutory bar to the pending application, and therefore that the Examiner has erred in citing the applicant's own work as prior art in rejecting claims 13-16 and 20 under 35 U.S.C. § 103(a) as being unpatentable over *Zhao et al.*, in view of *Hesline*, when rejecting claims 13, 15-16 under 35 U.S.C. § 103(a) as being unpatentable over *Liu et al.*, in view of *Hesline*, and when rejecting claims 13, 16-17 and 19 under 35 U.S.C. § 103(a) as being unpatentable over *Pan et al.*, in view of *Hesline*.

### **VIII. CONCLUSION**

For the reasons presented above, Appellant respectfully submits that the rejection of claims 13-20 is improper. Reversal of the rejection of claims 13-20 is requested.

Respectfully submitted,

/Raymond Hesline/  
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## IX. CLAIMS APPENDIX

1-12. (cancelled).

13. (previously presented) An optical device comprising a first combination of birefringent prisms with parallel optic axes for dividing an optical input beam into polarized beams, a second combination of birefringent prisms with parallel optic axes for combining polarized beams into an output beam, and a polarization changer disposed between said first combination of birefringent prisms and said second combination of birefringent prisms, wherein each birefringent prism of each said combination of birefringent prisms has oblique input and output faces.

14. (previously presented) The optical device of claim 13, further comprising a third combination of birefringent prisms with parallel optic axes disposed between said polarization changer and said second combination of birefringent prisms, wherein each birefringent prism of said third combination of birefringent prisms has oblique input and output faces.

15. (previously presented) The optical device of claim 13, wherein prisms of at least one combination of birefringent prisms are arranged about at least one reflector or refractor.

16. (previously presented) The optical device of claim 13, wherein prisms of at least one combination of birefringent prisms are arranged about a polarization changer.

17. (previously presented) The optical device of claim 13, wherein said device is an optical isolator, wherein light entering a first port of said device exits through a second port of said device, wherein light entering said second port does not exit through said first port, wherein at least one polarization changer of said device is a nonreciprocal polarization changer.

18. (previously presented) The optical device of claim 13, wherein said device is an optical attenuator, wherein light entering a first port of said device exits through a second port of said device with an intensity as determined by an intensity varying means, wherein at least one polarization changer of said device is a reciprocal polarization changer.
19. (previously presented) The optical device of claim 13, wherein said device is an optical circulator, wherein light entering a first port of said device exits through a second port of said device, wherein light entering said second port exits through a third port of said device, wherein at least one polarization changer of said device is a nonreciprocal polarization changer.
20. (previously presented) The optical device of claim 13, wherein said device is an optical switch, wherein light entering a first port of said device exits through a second port of said device or through a third port of said device as determined by a switching means, wherein at least one polarization changer of said device is a reciprocal polarization changer.

**X. EVIDENCE APPENDIX**

None.

**XI. RELATED PROCEEDINGS APPENDIX**

None.